DESCRIPTION OF THE NEST AND EGGS OF MEGA-SCOPS ASIO MAXWELLIÆ, THE ROCKY MOUNTAIN SCREECH OWL.

BY CAPT. CHARLES E. BENDIRE.

THE CREDIT of the discovery of the nest and egg of this race, the handsomest of the genus Megascops, belongs, I believe, to Mr. A. W. Anthony, one of our younger and most energetic naturalists, who has done excellent work in his line, as well as in other branches of natural history, in various portions of the West, and has generously donated through the writer a number of his rarest and most interesting specimens to the National Museum collection at Washington. He writes me as follows regarding this species. "On May 4, 1883, while collecting on the Platte River, about six miles from Denver, Colorado, my attention was attracted by the hammering of a Red-shafted Flicker, and pushing my way through a very thick growth of willows and small cottonwoods, I found the bird at work on a cottonwood, where he was excavating a nesting site. The tree was a very large one; its top had been partly broken off, about twelve feet up, blown over, and some of its limbs rested on the ground. As I climbed up, via the leaning top to the Colaptes burrow, which was located in that part of the trunk of the tree still standing upright, a Rocky Mountain Screech Owl flew out from a knot hole not before noticed and dashed almost in my face, lit on a tree within six feet of me, and after staring at me in amazement for a few minutes, dropped down and out of sight in the dense undergrowth in the neighborhood. The two burrows were about four feet apart, nearly on a level with each other, but on opposite sides of the tree." The Owl's nest was in an old knot hole about fifteen inches in length and judging from a rough sketch sent me by Mr. Anthony at the time, the base of the nest was almost on a level with the entrance. It contained three young about a week old and an addled egg. egg was not found until his return to the nest a second time a few hours afterwards, when one of the parents was caught and a careful examination of the nest made. This, if it can be called a nest, was composed of bits of dry rotten wood, a few feathers of small birds, and a good many fish scales. The tree was standing within a hundred yards of the river. Fish of various species

seem to form no inconsiderable portion of the diet of other small Owls as well, as I have personally found on more than one occasion good-sized brook trout (Salmo purpuratus) in the burrows used by the Kennicott's Screech Owl (Megascops asio kenicottii) in Washington Territory. Just how they manage to catch an active fish like a brook trout if they take them alive, which in my opinion I must confess is very questionable, would be interesting to know.* Mr. Anthony thinks that the Rocky Mountain Screech Owl breeds also in old abandoned nests of the Blackbilled Magpie (Pica pica hudsonica), and he writes me that he has often found them roosting in them both in winter and spring, and has found the American Long-eared Owl (Asio wilsonianus) breeding in such nests.

Mr. Denis Gale of Gold Hill, Colorado, has taken several nests of this bird during the last three years, and finds them not at all uncommon in his vicinity. A set of four eggs, now before me, was found by him on April 20, 1886, on Boulder Creek, near Boulder City, Colorado. He writes me regarding these eggs as follows: "Judging from the different stages of advancement in the embryos, I am inclined to think that they were laid at intervals of from forty-eight to seventy-two hours and the eggs were covered continuously from the time the first one was laid. The burrow used for a nesting site by this pair of birds was an old Flicker's hole, in a cottonwood tree, about twenty feet from the ground. There was nothing between the eggs and the bare wood bottom on which they lay that bore the semblance of a nest, excepting a little wood dust and a few wing and tail feathers of the Arctic Bluebird and several species of Sparrows. feathers were without doubt the remnants of birds fed to the sitting female by her mate, the soiled and stained eggs showing plainly their coming in contact with the mangled food, devoured over them." The female covered her eggs with great persistency and was only removed off them by force, snapping her bill and using her sharp claws with great energy when handled. Mr. Gale tells me that besides small birds, several species of the smaller rodents, frogs, and crawfish also form part of their bill of fare.

^{*}Since this article has been written, I notice that this fishing propensity is not confined to the two races mentioned therein, but is common to the Eastern form as well. See M. A. Frazar in Bull. Nutt. Ornith. Club, Vol. II, No. 3, July, 1877, p. 80, and Willard E. Treat in 'The Auk,' Vol. VI, No. 2, April, 1889, p. 189.

Mr. Gale writes further as follows: "Rarely does this species follow the creeks far into the foot-hills; I have not observed them at 6000 ft. altitude. Like others of their genus, they seem to delight in a sheltered, shady location, close to a pond or creek, where they select a domicile, either in a natural tree hole or in a Flicker's old nest site. If for any reason the Flicker wishes to retain his previous year's nest site, and Scops is in possession, strife is carried on between them with great address, ending as often in favor of one as the other, judging from the broken eggs upon the ground ejected by the victor. The Flicker dares not enter, to turn Scops out, but if the premises are vacated for ever so short a time, he enters, and holds them against all comers; his formidable bill pointing out at the door is sufficient apology for leaving him in quiet possession.

"About the middle of April is the usual period for the eggs, which are from three to five in number. The nest is usually a sparse gathering of wing and tail feathers of small birds; in some instances no litter of any kind is present; as a rule the first two or three eggs are laid on consecutive days, with intervals of two, three or more days between the third, and last one, or two, as the case may be. The female is always in charge, and at no time leaves the nest while sitting, or while her brood is very young; she is waited upon, and fed by the male, who, being a skilful hunter, provides liberally for her wants. Searching for nests, I have sometimes discovered the male hidden in a tolerably well stocked larder, in close proximity to the nest site. In one cache were portions of a Bluebird, a mouse, and a frog; in another a Junco, a tree Sparrow, and a minnow three and a half inches long: claws and legs of crawfish were also present. In a few cases I have discovered the male sitting upon a bough close to the stem of a cottonwood tree, perfectly motionless, with eyes almost closed as if asleep, the pupil of the eye closed to the merest slit, but with ears erect, and all alive to the danger threatening his sitting mate close by; in this well selected position, his color and markings so nearly resembling the rough, corrugated bark of the tree, he seemed to have the fullest assurance of security against observation.

"The female is a close sitter; to induce her to leave her nest is a difficult matter, unless she has been frequently disturbed and understands what is meant when she hears the tree grappled in climbing it; she will then fly out. Otherwise you have to take her off her eggs. In some instances she will feign dead, and lie on her back in your open palm with her eyes shut; immediately you throw her off, however, she will right herself on wing, and gaining a bough upon a neighboring tree, will crouch forward, bending her ear-tufts back, and look very spiteful and wicked. At other times when removed from her eggs she will snap her bill, moan slightly, and show fight. Both male and female indulge in the screech which differs but little from that of their Eastern cousins; its sharp distressing notes can be heard of a still night, a mile distant.

"The lately hatched young are clothed in beautiful white down. In the latter part of June before they are well able to fly, they may be seen sitting side by side, perfectly motionless, upon a limb close by the nest-site. The young and their parents as well seem to desert their holes and live among the trees for the balance of the summer; but against the cold winds that strip the leaves off the trees in the fall, suitable tree holes are selected for their winter quarters."

While stationed at Fort Custer, Montana, during the winter of 1884-85, I took five of these birds, but was unable to find their nests. I discovered their presence there quite accidentally. On Dec. 1, 1884, while out hunting Sharptail Grouse (Pediocætes phasianellus campestris) in a bend of the Bighorn River, a few miles south of the Post, as I was walking by a thick clump of willows I indistinctly noticed a whitish-looking object dropping on the ground, apparently out of the densest portion of the thicket and on the opposite side from where I was standing at the time, and simultaneously heard several plaintive squeaks from that direction. Carefully skirting around the thicket, which was some twenty vards long and perhaps five wide, I saw the object of my search savagely engaged in killing a meadow mouse which it had just captured. I promptly shot it. It proved to be a female and excessively fat, in fact all the specimens I secured subsequently, showed conclusively that they managed to secure an abundance of food in that Arctic winter climate, and that a portion of this at least, seems to be obtained in the daytime. The four other specimens collected by me were all obtained in similiar locations. I have no doubt that it breeds in the vicinity of Fort Custer, but I lost all trace of these birds in the spring months and failed to hear

their love notes at that time. It is possible that they retire a little nearer to the mountains to breed. This is, up to date, the most northerly locality recorded at which the Rocky Mountain Screech Owl has been obtained.

Their eggs are pure white in color with little gloss; in shape they are elliptical oval, in fact decidedly more elongated than the eggs of the other races of *Megascops*, which are almost invariably perfectly oval in shape, and some almost spherical. The usual number laid to a set seems to be four. The first specimen, No. 22,450 National Museum collection, measures 1.48×1.16 inches. The set from Boulder Co., Colorado, collected by Mr. Gale, No. 22,931 National Museum collection, measures 1.60 × 1.18, 1.57 × 1.16, 1.49 × 1.17, 1.46×1.17 inches. Thirty-eight eggs taken by Mr. Gale average × 1.44 1.18 inches. These eggs were in ten sets; three sets consisted of three eggs each, six of four, and one of five.

NOTES ON BIRDS OBSERVED IN THE VICINITY OF ENGLEWOOD, NEW JERSEY.

BY FRANK M. CHAPMAN.

Under this title it is my object to present certain observations which seem worthy of record, and, for the sake of completeness, to include several notes which have before appeared in the pages of this journal. To the gentlemen, below mentioned, who have assisted me I desire to express my sincere thanks.

- I. Anas penelope. WIDGEON. This accidental visitor from the Old World was killed by Mr. Cornelius Demarest in the spring of 1880 or 1881; the specimen I have not seen, but Mr. Demarest's great familiarity with the Ducks which occur here, acquired during many years of experience, his identification of the bird at the time of capture, his accurate description of it now, and the fact of its being killed from a flock of three American Widgeon (Anas americana), all combine to render this record worthy of entire acceptance.
- 2. Ectopistes migratorius. Passenger Pigeon.—During the twelve years in which I have hunted in this locality I have found but two birds of this species, killed in September, 1878.